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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,103	10/26/2000	Joachim Zimmer	1356	1589

7590 02/27/2003

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Huntington, NY 11743

EXAMINER

COLE, LAURA C

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/674,103

Applicant(s)

ZIMMER, JOACHIM

Examiner

Laura C Cole

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to because Figure 1 displays axle (16) and drive shaft (12) attached to two different elements. It appears that axle (16) is attached to tube (104) while the drive shaft is attached to a small separate linkage that is unlabeled in the drawings. Therefore, Figures 2 and 8 each imply that axle (16) and drive shaft (12) are attached to the same base linkage member and Figure 1 implies the opposite making Figures 1, 2, and 8 unclear. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it is more than a single paragraph in length. Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities:

Page 1, Lines 4-5, "...as generically defined by the preamble to claim 1" must be deleted because the specification is to support the claims, not vice versa.

Page 10 Line 15 there is a typographical error "the tb (14)..." Element (14) is stated to be a lever so it is not sure what is meant.

Appropriate correction is required.

Claim Objections

4. Claims 1-15 are objected to because of the following informalities:

Claim 1 Line 6 recited "pivotably." Does applicant intend "pivotally" in all places where "pivotably" occurs?

Claim 1 recites "An apparatus *for securing* a wiper arm..." Does applicant intend to positively claim the wiper arm by reciting, "An apparatus for securing a wiper system *comprising a wiper arm*, that is driven..." or possibly "A wiper securing system *comprising a wiper arm*, that is driven..."?

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the drive shaft" in Line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the mounting direction" in Line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 line 2 it is not clear what is meant in that the "disk is *pressed*..."

Claim 4 line 2 it is not clear what is meant in that the "axle is joined *solidly*..."

Claim 4 line 2 and Claim 5 are unclear since the "axle is joined *solidly*..." in Claim 4, however the axle of Claim 5 requires a clearance fit. Is a clearance fit considered "solid"?

Claim 7 is unclear. It is uncertain as to what is meant by "the side walls...as merging in the mounting direction..." since the mounting direction appears to be downward, then that the "cross-sectional region deviates(ing) from radial symmetry..." This is also unclear in the specification on page 11 lines 2-5. It is not certain what the applicant means.

Claim 9 Line 10 it is unclear what is meant by "*suitably* shaped."

Claims 10-12 it is unclear again to what is meant by the "cross sectional region deviating from radial symmetry..."

Claim 12 Line 4 "and/or" is improper and unclear.

Claim 13 Line 3 "and/or" is improper and unclear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Folberth et al., USPN 1,571,516.

Folberth et al. discloses a windshield cleaner comprising a wiper arm (Figure 1 (9)) which is driven via a lever mechanism that has a drive lever (Figure 1 (13)) connected in a manner fixed against relative rotation to the drive shaft (Figure 2 (10) is the drive shaft and a set screw (Figure 1 (14)) forms the connection, see also Page 1 lines 71 to 84), a steering lever (Figure 1 (15)) connected to an axle (noted by pin (Figure 1 (20)) which is pivotally connected to a wiper lever (Figure 1 (23)) characterized in that the steering lever (Figure 1 (15)) is braced in the mounting direction (see Figure 2 for direction) on a bearing shoulder (Figures 4 and 5 (17) is the bearing that has a shoulder from which (18) extends) on the axle (Figure 5.) Folberth et al. also disclose that the steering lever (Figure 1 (15)) is braced on the bearing shoulder via a disk (Figure 5 (21) is a washer) that is pressed by positive engagement onto the axle, and that the axle is joined in the pivoting direction to the disk (Figures 4 and 5) and the disk is joined by positive engagement to the steering lever in the pivoting direction (Page 1 Lines 88 to 102.)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Folberth et al., USPN 1,571,516.

Folberth et al. discloses all elements as mentioned above, however does not disclose that the steering lever (Figure 1 (15)) is made from sheet metal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use sheet metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. In re Leshin, 125 USPQ 416.

8. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schill et al., USPN 5,884,357 in view of Zimmer, DE 44 28 371.

Schill et al. discloses a four joint wiper arm for a windshield wiper system that comprises a drive lever (Figure 2 (4)) connected to and fixed against relative rotation to a drive shaft (Figure 2 (7)), a steering lever (Figure 2 (5)) connected to an axle (Figure 2 (11)) which is pivotally connected to a wiper lever (Figure 2 (6)) that is braced in the mounting direction (see arrangement direction in Figure 4). Schill et al. does not disclose specific pivotal connections such as one having levers braced in the mounting direction on a bearing shoulders.

Zimmer displays a connection between a shaft (or axle) (Figure 1 (10)) and a wiper "lever" (Figure 1 (14)) wherein the lever is braced in the mounting direction on a bearing shoulder (Figure 2 (26)) via a disk (Figure 2 (12)), and the disk is pressed by positive engagement onto the axle. The axle is joined solidly to the disk in the pivoting

direction (see screw thread (Figure 2 (24) direction) in a clearance fit (clearance gaps evident in Figure 3). The lever positively surrounds the disk and has circumferential "side walls" (Figure 2 (34) is a side wall and Figure 3 displays the lever surrounding the disk. It appears from Figure 2 that the "side walls" are merging in the mounting direction (upwards) from a smaller cross sectional region to a larger cross sectional region. The axle has a region (Figure 2 (22) wherein the cross section deviates from radial symmetry. Further, Zimmer displays an axle that has a cross sectional region deviating from radial symmetry (Figure 2 (22)) and a pressure piece (Figure 2 (28)) placed between the axle and lever (Figure 3) that has an opening (Figure 2 (30)) that suits the cross sectional region and positively surrounds the axle (Figure 3) and has an outer cone (Figure 2 (34) is cone shaped) pressed within in it an inner cone (Figure 2 (28) and is fixed axially on the bearing shoulder (Figure 3.) The axle and pressure piece appear to be connected positively via from six load-bearing faces (Figure 2).

It would have been obvious for one of ordinary skill in the art to use the lever structure that Schill et al. discloses and substitute the pivotal joints for those that Zimmer teaches so that the positioning of levers to the axles is not affected by manufacturing tolerances.

9. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schill et al., USPN 5,884,357 in view of Zimmer, DE 44 28 371.

Zimmer further discloses that the lever around the connection point to the axle has an indentation (Figure 2, dashed lines.) However, neither Zimmer nor Schill et al. disclose that the lever is a sheet metal part. It would have been obvious to one of

ordinary skill in the art at the time the invention was made to use sheet metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. In re Leshin, 125 USPQ 416.

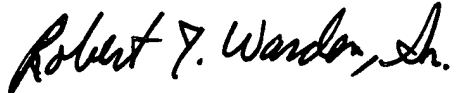
Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (703) 305-7279. The examiner can normally be reached on Monday-Thursday, 7am - 4:30pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on (703) 308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8772 for regular communications and (703) 873-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

LCC
LCC
February 19, 2003


ROBERT J. WARDEN, SR.
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